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Overview

The month of November 2008 was characterized by near normal temperatures (Table 1). Below normal temperatures for much of the month were offset by near-record to record high temperatures in the 70s from the 3rd to the 6th (Figs. 1-3). In general, southern parts of Southwestern Lower Michigan were colder than normal compared to northern parts of Southwestern Lower Michigan (Fig. 4).

Precipitation was slightly below normal for the month (Table 1). Precipitation occurred more frequently during the first half of the month (Figs. 5-7). In general, southern parts of Southwestern Lower Michigan were drier than normal compared to northern parts (Fig. 8). In spite of below normal precipitation across the area, snowfall was above normal, particularly near the lakeshore (Fig. 9).

TABLE 1. Reported temperature, precipitation and snowfall amounts for November 2008 at selected climate stations in Southwest Lower Michigan.

Location		Temperature (degrees F)	Precipitation (inches)	Snowfall (inches)
Grand Rapids	Reported	38.9°	2.07	10.0
	Normal	38.4°	3.35	7.7
	Departure	+0.5°	-1.28	+2.3
Lansing	Reported	37.6°	1.69	7.5
	Normal	38.0°	2.66	5.1
	Departure	-0.4°	-0.97	+2.4
Muskegon	Reported	39.4°	2.94	14.8
	Normal	38.7°	3.23	8.7
	Departure	+0.7°	-0.29	+6.1

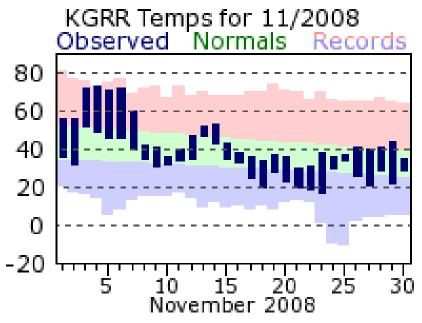


FIG. 1. Observed temperatures at the Grand Rapids International Airport. Dark blue bars are the temperature range for each day. The green strip indicates the normal range of temperatures. Record high and low temperatures are indicated at the top of the pink area and the bottom of the blue area, respectively.

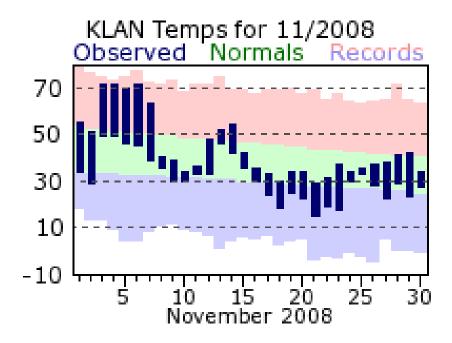


FIG. 2. As in Fig. 1 except for the Lansing airport.

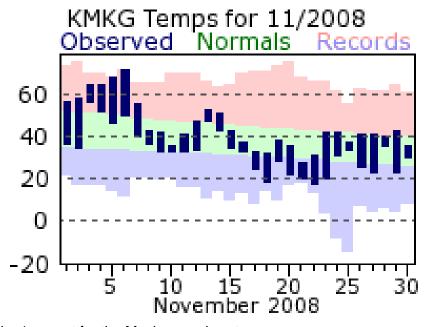


FIG. 3. As in Fig. 1 except for the Muskegon airport.

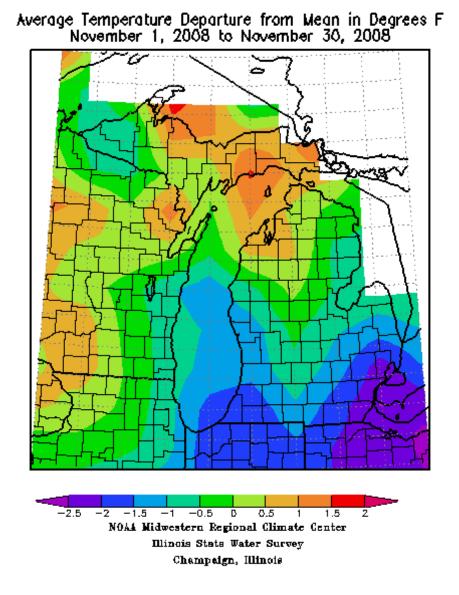


FIG. 4. Average temperature departure (in degrees F) for November of 2008.

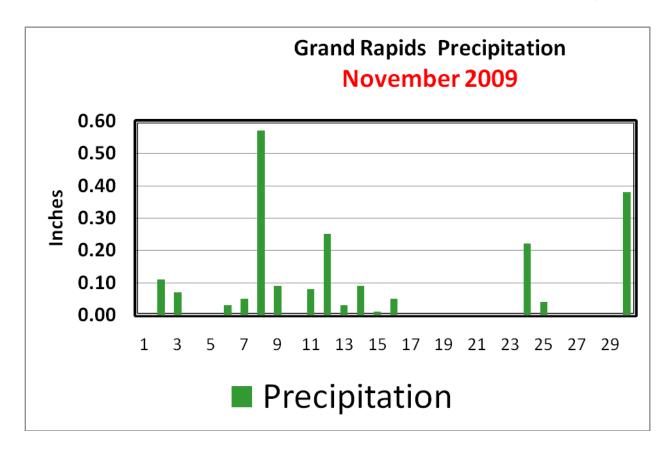


FIG. 5. Daily precipitation for November of 2008 at the Grand Rapids International Airport.

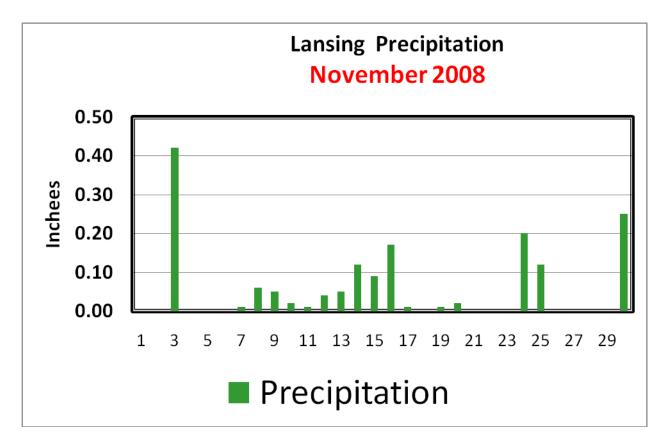


FIG. 6. As in Fig. 5 except for the Lansing Capital City Airport.

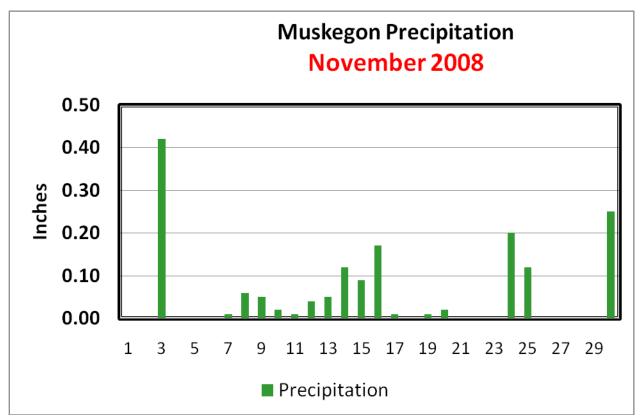


FIG. 7. As in Fig. 5 except for the Muskegon County Airport.

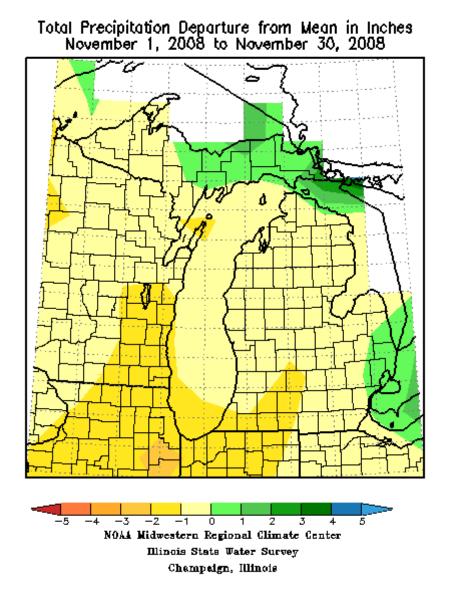


FIG. 8. Average precipitation departure (in inches) for November of 2008.

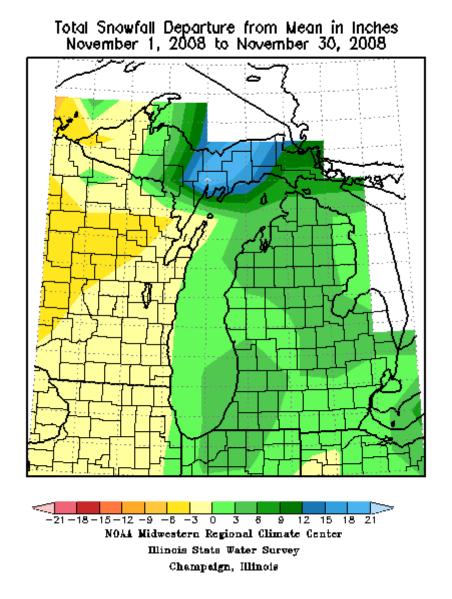


FIG. 9. Departure from normal snowfall (in inches) for November of 2008.

Highlights of the month

A warm spell occurs with near record or record high temperatures in the 70s.

$$7^{th} - 9^{th}$$

A storm system passes through the area and brought between a quarter and one and a half inches of precipitation to areas near and west of route 131.

A brief warm-up brings temperatures back into the 50s.

A strong cold front passes through the area. Temperatures from the 16th to the 25th remain below 40 degrees across most of the area. The last time this happened in November was from the 12th through the 21st in 1959.

Lake effect snow behind the cold front drops 6 to 10 inches of snow from Holland to South Haven (Fig 10). The highest report is 10 inches at Fennville.

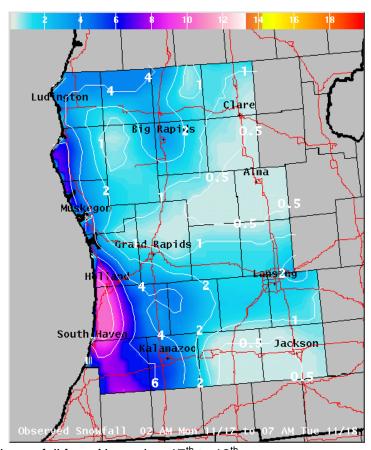


FIG. 10. Storm total snowfall from November 17th to 18th.

20th - 21st

Another lake effect snow event brings another 6 to 12 inches over much of the same area (Fig. 11). This time Covert receives the greatest amount of snow.

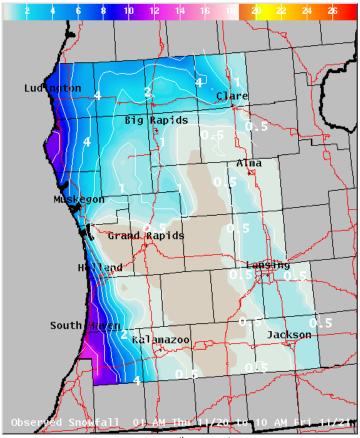


FIG. 11. Storm total snowfall from November 20th to 21st.

24th - 25th

A winter storm produces a more widespread area of snow, with greatest amounts over the northeastern part of Southwest Lower Michigan (Fig 12).

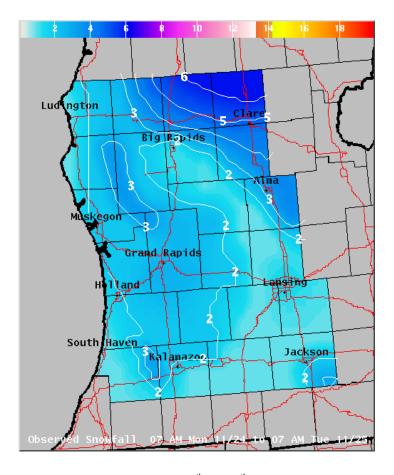


FIG. 12. Storm total snowfall from November 24th to 25th.

30th - 1st

The final winter storm system of the month approaches from the southwest and gives a significant snowfall to much of the area (Fig.13). Byron Center, Greenville, and Sparta all report totals around 7 inches.

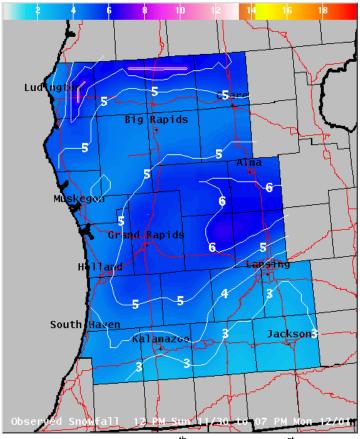


FIG. 13. Storm total snowfall from November 30th to December 1st. Note that not all of the snow fell in the month of November for this event.